

WHAT IS CLAIMED IS:

1. A method for use in a distributed management framework comprising a plurality of applications, wherein each of the plurality of applications is configured to make function calls to standard programming functions, the method comprising:
  - 5 intercepting the function calls to the standard programming functions made by the plurality of applications;
  - routing the function calls to alternative implementations of the standard programming functions;
- 10 using the alternative implementations of the standard programming functions to collect availability metrics for the plurality of applications.
2. The method of claim 1,  
wherein the standard programming functions comprise memory functions.
- 15 3. The method of claim 1,  
wherein the intercepting the function calls comprises intercepting the function calls in a production environment.
- 20 4. The method of claim 1, further comprising:  
inserting agents into the plurality of applications at application launch;  
wherein the agents are configured to perform the intercepting the function calls to the standard programming functions.
- 25 5. The method of claim 1, further comprising:  
modifying program code of at least one of the applications to enable the intercepting the function calls to the standard programming functions.
6. The method of claim 1, further comprising:

using the availability metrics for performance management of the plurality of applications in the distributed management framework.

7. The method of claim 1, further comprising:
  - 5 configuring the distributed management framework to monitor a subset of the plurality of applications.
8. The method of claim 1, further comprising:
  - 10 aggregating the availability metrics for the plurality of applications at a console for performance management.
9. A carrier medium comprising program instructions for use in a distributed management framework comprising a plurality of applications, wherein each of the plurality of applications is configured to make function calls to standard programming functions, wherein the program instructions are computer-executable to implement:
  - 15 intercepting the function calls to the standard programming functions made by the plurality of applications;
  - routing the function calls to alternative implementations of the standard programming functions;
  - 20 using the alternative implementations of the standard programming functions to collect availability metrics for the plurality of applications.
10. The carrier medium of claim 9,
  - 25 wherein the intercepting the function calls comprises intercepting the function calls in a production environment.
11. The carrier medium of claim 9, wherein the program instructions are further computer-executable to implement:
  - inserting agents into the plurality of applications at application launch;

wherein the agents are configured to perform the intercepting the function calls to the standard programming functions.

12. The carrier medium of claim 9, wherein the program instructions are further  
5 computer-executable to implement:  
modifying program code of at least one of the applications to enable the  
intercepting the function calls to the standard programming functions.
13. The carrier medium of claim 9, wherein the program instructions are further  
10 computer-executable to implement:  
aggregating the availability metrics for the plurality of applications at a console for  
performance management.
14. A system for use in a distributed management framework, the system comprising:  
15 a plurality of application servers comprising a plurality of applications, wherein  
each of the plurality of applications is configured to make function calls to  
standard programming functions; and  
a performance management system which is operable to:  
intercept the function calls to the standard programming functions made by  
20 the plurality of applications;  
route the function calls to alternative implementations of the standard  
programming functions; and  
use the alternative implementations of the standard programming functions  
to collect availability metrics for the plurality of applications.
- 25 15. The system of claim 14,  
wherein the intercepting the function calls comprises intercepting the function  
calls in a production environment.

16. The system of claim 14, wherein the performance management system is further operable to:

insert agents into the plurality of applications at application launch;  
wherein the agents are configured to intercept the function calls to the standard  
5 programming functions.

17. The system of claim 14, wherein the performance management system is further operable to:

modify program code of at least one of the applications to enable the performance  
10 management system to intercept the function calls to the standard  
programming functions.

18. The system of claim 14, wherein the performance management system is further operable to:

15 aggregate the availability metrics for the plurality of applications at a console for  
performance management.

19. A system for use in a distributed management framework comprising a plurality of applications, wherein each of the plurality of applications is configured to make  
20 function calls to standard programming functions, the system comprising:

means for intercepting the function calls to the standard programming functions  
made by the plurality of applications;

means for routing the function calls to alternative implementations of the standard  
programming functions;

25 means for using the alternative implementations of the standard programming  
functions to collect availability metrics for the plurality of applications.

20. A method for use in a distributed management framework comprising a plurality of applications, the method comprising:

30 starting a manager thread inside each of the plurality of applications; and

using the manager threads to monitor execution of the plurality of applications in a production environment.

21. The method of claim 20,

5 wherein the plurality of applications comprises a first application, and wherein the using the manager threads to monitor execution of the plurality of applications comprises using the manager thread in the first application to determine that the first application is hung.

10 22. The method of claim 20, further comprising:

collecting availability metrics for the plurality of applications using internal monitoring of the plurality of applications; and  
using the manager threads to trigger output of the availability metrics to an external recipient.

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23. A method for use in a distributed management framework comprising a plurality of applications, wherein the plurality of applications comprise at least one monitored application, the method comprising:

20 modifying program code of the monitored application to include additional instructions;  
using the additional instructions in the monitored application to monitor execution of the monitored application in a production environment; and  
automatically generating output in response to a triggering event in the execution of the monitored application, wherein the output comprises an execution history for the monitored application.

25 24. The method of claim 23,

wherein the using the additional instructions in the monitored application to monitor execution of the monitored application comprises recording an

execution trace of the execution of the monitored application on a per-thread basis.

25. The method of claim 23,

5 wherein the using the additional instructions in the monitored application to monitor execution of the monitored application comprises recording entries to and exits from function calls during execution of the monitored application.

10 26. The method of claim 23,

wherein the using the additional instructions in the monitored application to monitor execution of the monitored application comprises capturing exceptional control transfers during execution of the monitored application.

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27. The method of claim 23,

wherein the using the additional instructions in the monitored application to monitor execution of the monitored application comprises tracking creation of data objects during execution of the monitored application.

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28. The method of claim 27,

wherein the using the additional instructions in the monitored application to monitor execution of the monitored application comprises recording metrics for the creation of data objects.

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